

APPLICANT(S): TZIDON, Aviv et al.  
SERIAL NO.: 10/583,867  
FILED: August 8, 2008  
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### AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1-39. (Cancelled)

40. (**Currently amended**) An automated positioning system for determining the angular position of a vehicle with respect to a predetermined path, using at least ~~one beam~~ two beams sweeping across at least a sector of interest, said ~~[[beam]]~~ at least two beams originating from a known generated by at least one beacon whose position relative to the predetermined path is ~~known~~, the system comprising:

at least one electro-optical sensor onboard the vehicle for detecting said at least two beams ~~one beam~~; and

a logic circuitry on board the vehicle for processing a signal generated by said at least one electro-optical sensor so as to determine an ~~determining the~~ angular position of the vehicle with respect to the predetermined path.

41. (Previously presented) The system as claimed in claim 40, wherein the logic circuitry comprises a processor.

42. (**Currently amended**) The system as claimed in claim 40, wherein the logic circuitry is configured adapted to determine a time of detection of a beam of said at least two beams ~~one beam~~ by the sensor.

43. (**Currently amended**) The system as claimed in claim 40, wherein the logic circuitry is configured adapted to determine a sweeping direction of a beam of said at least two beams ~~one beam~~ across the sensor.

44. (**Currently amended**) The system as claimed in claim 40, wherein said at least one electro-optical sensor comprises two sensing elements ~~so as to allow determining the sweeping direction of said at least one beam as it sweeps across the sensor.~~

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45. **(Currently amended)** The system as claimed in claim 40, wherein said at least one electro-optical sensor is configured ~~adapted~~ to distinctly detect different optical characteristics of a beam of said at least two beams ~~one beam~~.

46. (Previously presented) The system as claimed in claim 40, wherein said at least one electro-optical sensor is provided with a filter.

47. **(Currently amended)** The system as claimed in claim 46, wherein said filter is selected from a group consisting of ~~comprising~~: polarizing filter, wavelength filter.

48. **(Currently amended)** The system as claimed in claim 40, further comprising at least one off board beacon located at the known ~~whose position relative to the predetermined path is known~~ for generating said at least ~~one beam sweeping across at least a sector~~ two beams.

49. **(Currently amended)** The system as claimed in claim 40 ~~[[48]]~~, wherein ~~said at least one beacon is adapted to generate~~ a beam of said at least two beams sweeps ~~one beam sweeping across at least said sector~~ back and forth across the sector.

50. (Previously presented) The system as claimed in claim 48, wherein said at least one beacon comprises a single beacon.

51. (Previously presented) The system as claimed in claim 48, wherein said at least one beacon comprises two beacons.

52. **(Currently amended)** The system as claimed in claim 40 ~~[[48]]~~, wherein said at least ~~one beacon generates two synchronized beams~~ are synchronized ~~sweeping across said sector~~.

53. **(Currently amended)** The system as claimed in claim 52, wherein said at least ~~one beacon generates two synchronized beams~~ sweep ~~sweeping~~ in opposite directions across ~~[[said]]~~ the sector.

54. **(Currently amended)** The system as claimed in claim 40 ~~[[48]]~~, wherein said at least ~~one beam generated by said at least one beacon is~~ two beams are characterized by optical

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characteristics so as to allow determining of the sweeping direction or azimuth information associated with each beam ~~the beacon~~.

55. (Previously presented) The system as claimed in claim 54, wherein the optical characteristics are selected from a group of optical characteristics: polarization, wavelength, intensity, amplitude modulation frequency, amplitude modulation contrast.

56. (**Currently amended**) The system as claimed in claim 40 [[48]], wherein a beam of said at least two beams ~~one beam generated by said at least one beacon~~ is characterized as spanning the entire ~~said at least a~~ sector and ~~characterized~~ by distinct optical characteristics of specific angular zones of that beam ~~so as to allow determination of their relative direction with respect to the beacon~~.

57. (**Currently amended**) The system of claim 40, wherein the logic circuitry is further capable of generating ~~generates~~ control commands for controlling [[the]] maneuvering actuators of the vehicle.

58. (**Currently amended**) The system of claim 40, wherein the vehicle is selected from a group consisting of ~~comprising~~: an unmanned aerial vehicle, a naval vessel, a land vehicle.

59. (**Currently amended**) An automated positioning method for determining [[the]] an angular position of a vehicle with respect to a predetermined path, using at least two beams ~~one beam~~ sweeping across at least a sector of interest, each [[said]] beam of said two beams ~~originating from a known~~ generated by at least one beacon ~~whose position relative to the predetermined path is known~~, the method comprising:

detecting at least one of said at least two beams ~~one beam~~ by at least one electro-optical sensor onboard the vehicle; and

processing by a logic circuitry on board the vehicle a signal generated by the sensor so as to determine ~~determining~~ the angular position ~~of the vehicle with respect to the predetermined path by a logic circuitry on board the vehicle~~.

60. **(Currently amended)** The method as claimed in claim 59, comprising timing detection of ~~the~~ a beam of said at least two beams by the sensor ~~to determine the relative position of the vehicle with respect to a specific alignment relative to the beam.~~

61. **(Currently amended)** The method as claimed in claim 59, comprising determining a sweeping direction of a beam of said at least ~~one beam~~ two beams across the sensor.

62. **(Currently amended)** The method as claimed in claim 61 [[59]], wherein said at least one sensor comprises two sensing elements, ~~the method comprising determining the sweeping direction of said at least one beam as it sweeps across the sensor.~~

63. **(Currently amended)** The method as claimed in claim 59, comprising distinctly detecting different optical characteristics of a beam of said at least two beams ~~one beam~~.

64. **(Currently amended)** The method as claimed in claim 59, further comprising providing at least one off board beacon ~~whose~~ located at the known position ~~relative to the predetermined path is known~~ for generating said at least two beams ~~one beam~~ ~~sweeping across at least a sector.~~

65. **(Currently amended)** The method as claimed in claim 64, comprising generating by said at least one beacon a beam of said at least two beams ~~one beam~~ ~~that~~ such that the beam sweeps across at least said sector back and forth across the sector.

66. (Previously presented) The method as claimed in claim 64, wherein said at least one beacon comprises a single beacon.

67. (Previously presented) The method as claimed in claim 64, wherein said at least one beacon comprises two beacons.

68. **(Currently amended)** The method as claimed in claim 59 [[64]], wherein said at least two beams are synchronized ~~beams sweeping across said sector by said at least one beacon.~~

69. **(Currently amended)** The method as claimed in claim 68, wherein said at least two ~~synchronized~~ beams sweep in opposite directions across the [[said]] sector.

70. **(Currently amended)** The method as claimed in claim 59 [[64]], comprising characterizing a beam of said at least two beams ~~one-beacon~~ by optical characteristics so as to allow determining of [[the]] a sweeping direction or azimuth ~~information~~ associated with the beam-beacon.

71. (Previously presented) The method as claimed in claim 70, wherein the optical characteristics are selected from a group of optical characteristics: polarization, wavelength, intensity, amplitude modulation frequency, amplitude modulation contrast.

72. **(Currently amended)** The method as claimed in claim 59 [[64]], ~~comprising~~ characterizing wherein a beam of said at least two beams is characterized ~~one-beam generated by said at least one beacon~~ as spanning the entire ~~said at least a sector~~ and characterized by distinct optical characteristics of specific angular zones of that beam ~~so as to allow determination of their relative direction with respect to the beacon~~.

73. (Previously presented) The method of claim 59, comprising generating control commands by the logic circuitry for controlling the maneuvering actuators of the vehicle.

74. **(Currently amended)** The method of claim 59 62, wherein the vehicle is selected from a group consisting of ~~comprising~~: an unmanned aerial vehicle, a naval vessel, a land vehicle.